



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants: Oliver et al.

Serial No.: 10/815,511

For: USE OF NODES TO MONITOR OR MANAGE PEER TO PEER
NETWORKS

Filed: 1 APR 2004

Examiner: Dady Chery

Art Unit: 2616

Confirmation No.: 1299

Customer No.: 27,623

Attorney Docket Nos.: 300203615-4
976.8021USU1

APPEAL BRIEF FILED UNDER 35 U.S.C. §134

Mail Stop Appeal Brief - Patents
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Appellants are filing this Appeal Brief under 35 U.S.C. 134 and in accordance with the provisions of 37 C.F.R. 41.37(a), and believe that the Appeal Brief complies with the requirements set forth in 37 C.F.R. 41.37(c). The claims on appeal are set forth in an Appendix, below.

On 29 APR 2008, Appellants mailed a Notice of Appeal. Appellants believe that no petition or fee for an extension of time is required to file this Appeal Brief. However, should Appellants be mistaken, please consider this to be a petition for any required extension of time, and please then also charge Deposit Account No. 08-2025 for the required fee. Likewise, the Commissioner is hereby

authorized to charge Deposit Account No. 08-2025 for any required fee not submitted herewith, or submitted incorrectly, so as to maintain the pendency of the above-identified patent application.

(i) Real Party in Interest

The real party in interest is Hewlett-Packard Development Company, L.P.

(ii) Related Appeals and Interferences

The undersigned attorney is not aware of any related appeals or interferences.

(iii) Status of the Claims

Claims 1 – 4 and 11 - 26 are pending in this application, and are the subject of this Appeal.

In an Office Action mailed 29 JAN 2008 (hereinafter "the Office Action"), the Examiner made final the rejection of claims 1 – 4 and 11 – 26. More specifically, the status of the claims is as follows:

1 – 4: rejected
5 – 10: canceled
11 – 26: rejected

(iv) Status of Amendments

No amendments to any of the claims were proposed subsequent to final rejection.

(v) Summary of Claimed Subject Matter

This Summary makes reference to FIGS. 1, 2, 4 and 9. These figures are provided below, at the end of the Summary.

FIG. 1 is a schematic illustration of a network of computer entities arranged on a peer to peer basis, where each computer is provided with a peer to peer protocol for interacting with other

computers in the network. Each of a plurality of computer entities 100-103 communicates with one or more of the other computer entities within the network, and can act either as a client to any other computer entity in the network, and/or as a server to another computer entity. Each computer entity therefore has two modes of operation, firstly acting as a client, where for example it may access data or services stored on another computer entity in a network, or secondly acting as a server, in which case another computer entity may access data or services stored on the computer entity itself. In a general case of a peer to peer environment of connected computer entities, each computer entity represents topologically a node in a network. Connectivity between nodes can be arbitrary in the general case, with any node in the network connecting to any other node in the network.

Within the peer to peer network of FIG. 1, each peer computer contributes resources for use by other computers, as well as consuming services of the network. During periods of inactivity, any spare resources, such as data processing capacity, data storage capacity, connectivity resource or the like, are used to perform a distributed management function. The management functionality is packaged with a peer to peer overlay protocol, and is arranged to activate when the peer to peer protocol is installed or is activated, so that the computer entity is made to operate the management activity when it joins in a peer to peer network. In a specific mode of implementation, operation of the management functionality is activated as a condition of operating the peer to peer protocol.

Monitoring and management may include the following activities:

- Remote virus scanning of other computer entities in the network.
- Observing group behavior in a group of computer entities within the network
- Generating alert messages to alert other computer entities in the network that a particular computer entity is faulty or is misbehaving
- Generating virus alert messages to alert other computer entities in the network that a particular computer entity has a virus
- Placing a faulty computer entity into quarantine
- Performing a diagnosis of one or more faulty computer entities in the network.
- Application of voting protocols for recovering from large network failures.
- Detecting security breaches in said network.

- Detecting performance problems of computers in said network.

FIG. 2 is a schematic illustration of a computer entity that is a peer member of a network of peer to peer computer entities. A computer 200 comprises one or more communications ports 201 for communicating with other computer entities within the network; a data processor 202; a memory device 203; a data storage device 204, for example a hard disk data storage device or a RAID array; a user interface 205, for example comprising a visual display monitor, keyboard and pointing device such as a mouse, trackball, or the like; an operating system 206, for example Microsoft Windows, Linux, or Unix; a peer to peer network protocol layer 207 comprising a middle ware program component for applying a peer to peer network protocol, for example the known Gnutella protocol or similar; a network management application 208, as provided by a specific embodiment; a set of files 209, for example data files, mp3 files, image data files, text data files or the like which may be made available for use by one or more other computers in the network, one or a plurality of local applications 210 for providing local functionality of the computer; and one or more service applications 211 for providing a service, which can be assessed by other computers within the network.

Each computer entity has a set of resources which it can use itself, and which may be available for use by other computer entities within the network. The term 'resources' means any functionality provided by a computer entity. Resources may be transferable, that is downloadable to another computer entity, for example data files, application program files, or may be non-transferable, that is resources which must remain at the computer entity which provides them. Example of non-transferable resources include data processing power, data storage capacity, communications capacity or connectivity, or services which are provided by the computer entity and which are non-transferable to another computer entity.

At any time, the resources of the computer entity may be utilised to a varying extent. At some times, the computer will be in an idle state or a state of low activity, whereas at other times, the computer may be busy providing a service, processing data, or engaging in communications with other computers in the network. In particular, the utilisation of the data processing capacity, memory, communications ports and data storage, during operation of the computer, may be at a level which is low enough that those resources can be used to operate a network management service application 208 to provide a network management service on behalf of the network as a whole.

Thus, each peer computer comprises a set of resources comprising a data processing capacity, a bit rate capacity, data storage capacity, and data content; a resource encapsulation layer for accessing the resources; a higher level service layer for providing a set of higher level services provided by the computer entity, for example provided by one or more services applications; and a set of core networking services comprising a network overlay service for enabling the computer to become a member in a peer to peer computer network, and a network management component which operates using the resources, when the resources are not being used by the higher level services, or in response to a service request received from another peer computer.

FIG. 4 is a schematic illustration of a computer entity that is enabled to provide network management services within a peer to peer network. The computer entity comprises a set of resources 401, including data processing capability, bit rate capacity (bandwidth), data storage, and data content, for example music files, images files, text files; a resource encapsulation layer 402 which receives service requests from one or more peer computers and/or a user interface of the computer, the encapsulation layer encapsulating the details of supply of resources from the other peer computers or human users; a set of higher level services 403, which can be accessed by way of service requests received from other peer computer entities within the network, or from a human user of the computer entity, the higher level services comprising for example e-commerce services or the like; and a set of core services 404 including network management services, including network overlay services for establishing the computer as a member of a community of peer to peer connected computers in a peer to peer network, accounting functionality, fault diagnosis functionality and security services. The peer to peer overlay services govern how the peer computer entity communicates with other peer computer entities. Within the core services 404, the network management services and the peer to peer overlay functionality are linked, such that whenever the computer is engaging in a peer to peer network using the peer to peer overlay services, the network management functionality is automatically activated.

FIG. 9 illustrates, schematically, process steps carried out by a peer member for determining a local and global policy towards a specific target member of a peer to peer network. The local peer computer entity may test the target computer entity in process 900 for a particular parameter to be measured, for example, whether the target computer entity is faulty, or is freeloading. Various test procedures can be involved, such as requesting a file or service, or testing a received file for viruses. In

process 901, if the target computer entity is tested to have a detrimental characteristic, such as being faulty or freeloading, then in step 902, the local computer generates a local policy towards the target computer entity, in this example the policy being to exclude the target computer entity from the network. The policy may be adopted from a set of nodes pre-stored in the management program to take account of various situations such as freeloading, or a virus. In process 903, the local computer entity broadcasts its local policy data concerning the target computer to all other computer entities in the network of which it is aware, to inform those computer entities of the local computer entity's local policy towards the target computer. In process 904, the local computer entity collects responses from other computers in the network, concerning their local policies towards the target computer. In process 905, the local computer entity applies a voting procedure comprising a set of stored voting rules, in which each of the responses received from the other computer entities in the network, concerning the target computer are considered, and resulting in an overall vote as to whether the target computer entity will be excluded from the network or not. The voting rules are implementation specific, and may be by a simple majority rule, or by a pre-set percentage number of the computer entities voting that the computer target be excluded from the network. In process 906, the local computer entity adopts as its local policy a policy which has been elected by the voting procedure carried out in process 905. For example, where the majority vote is in favor of retaining the target computer entity on the network, the local computer entity will follow the result of the majority vote, and even though it has tested the target computer entity to be faulty, it will apply the majority vote in order to retain that target computer entity in the local computer entity's own list of members of the peer network.

Concise Explanation of Each of the Independent Claims

The present application contains six independent claims, namely claims 1, 11, 16, 17, 19 and 20. Below, Appellants are providing a concise explanation of the subject matter defined in each of the independent claims. The explanation refers to the specification by page and line number, and to the figures by reference characters.

CLAIM 1: A method performed by a first computer entity (FIG. 4; page 16, line 6, "local peer computer entity"), said method comprising:

operating a peer to peer protocol (FIG. 4, core services 404 overlay services; page 10, lines 23 - 29) for enabling said first computer entity to utilise a resource of a second computer entity

(page 16, line 6, “target computer entity”) in a peer to peer network (page 5, lines 17 – 21), and for enabling said second computer entity to utilise a resource of said first computer entity in said peer to peer network (page 5, lines 17 – 21); and operating a process (FIG. 4, core services 404 network management; FIG. 9, steps 900 – 906; page 16, line 6 – page 17, line 2) for managing said second computer entity, wherein said process utilises said resource of said first computer entity, and is invoked when said resource of said first computer entity is not being used by a service application at a higher level layer than said peer to peer protocol (page 10, lines 4 – 7).

CLAIM 11: A first computer entity (FIG. 4; page 16, line 6, “local peer computer entity”) comprising:

a peer to peer networking component (FIG. 4, core services 404 overlay services; page 10, lines 24 - 29) for allowing said first computer entity to engage other computer entities on a peer to peer basis; and
a network management component (FIG. 4, core services 404 network management; FIG. 9, steps 900 – 906; page 16, line 6 – page 17, line 2) for enabling said first computer entity to participate in management of a peer to peer network,
wherein said network management component operates a process for managing a second computer entity (page 16, line 6, “target computer entity”) in said peer to peer network, and
wherein said process utilises a resource of said first computer entity, and is invoked when said resource is not being used by a service application at a higher level layer than said peer to peer protocol (page 10, lines 4 – 7).

CLAIM 16: A data storage media comprising:

program data for controlling a first computer entity (FIG. 4; page 16, line 6, “local peer computer entity”) to perform a method that includes:
operating a peer to peer protocol (page 9, lines 19 – 20, “peer to peer protocol software”; FIG. 4, core services 404 overlay services; page 10, lines 23 - 29) for enabling said first computer entity to utilise a resource of a second computer entity (page 16, line 6, “target computer entity”) in a peer to peer network (page 5, lines 17 – 21), and for

enabling said second computer entity to utilise a resource of said first computer entity in said peer to peer network (page 5, lines 17 – 21); and
operating a process (page 9, line 20, “network management service program”; FIG. 4, core services 404 network management; FIG. 9, steps 900 – 906; page 16, line 6 – page 17 line 2) for managing said second computer entity,
wherein said process utilises said resource of said first computer entity, and is invoked when said resource of said first computer entity is not being used by a service application at a higher level layer than said peer to peer protocol (page 10, lines 4 – 7).

CLAIM 17. A method performed by a first computer entity (FIG. 4; page 16, line 6, “local peer computer entity”) having:

a set of computing resources (FIG. 4, resources 401); and
a higher level service provided by a service application (FIG. 4, higher level services 403),
said method comprising:

operating a peer to peer protocol (FIG. 4, core services 404 overlay services; page 10, lines 23 – 29) for enabling said first computer entity to utilise a resource of a second computer entity (page 16, line 6, “target computer entity”) in a peer to peer network (page 5, lines 17 – 21), and for enabling said second computer entity to utilise a resource of said computer entity (page 5, lines 17 – 21); and
operating a process (FIG. 4, core services 404 network management; FIG. 9, steps 900 – 906; page 16, line 6 – page 17, line 2) for managing said second computer entity,
wherein said process utilizes said set of computing resources, and is invoked when said set of computing resources is not being used by said service application at a higher level layer than said peer to peer protocol (page 10, lines 4 – 7).

CLAIM 19. A method performed by a first computer entity (FIG. 4; page 16, line 6, “local peer computer entity”), said method comprising:

operating a peer to peer protocol (FIG. 4, core services 404 overlay services; page 10, lines 23 – 29) for enabling said first computer entity to utilise a resource of a second computer entity (page 16, line 6, “target computer entity”) in a peer to peer network (page 5, lines 17 – 21),

and for enabling said second computer entity to utilise a resource of said first computer entity in said peer to peer network (page 5, lines 17 – 21); and
operating a process (FIG. 4, core services 404 network management; FIG. 9, steps 900 – 906; page 16, line 6 – page 17, line 2) for managing said second computer entity, in response to receipt of a service request (page 10, lines 6 – 7) from a third computer entity (page 16, line 17, “other computer entities”) in said peer to peer network.

CLAIM 20. A first computer entity (FIG. 4; page 16, line 6, “local peer computer entity”) comprising:

a peer to peer networking component (FIG. 4, core services 404 overlay services; page 10, lines 24 - 29) for allowing said first computer entity to engage other computer entities on a peer to peer basis; and
a network management component (FIG. 4, core services 404 network management; FIG. 9, steps 900 – 906; page 16, line 6 – page 17, line 2) for enabling said first computer entity to participate in management of a peer to peer network,
wherein said network management component operates a process for managing a second computer entity (page 16, line 6, “target computer entity”) in said peer to peer network, in response to receipt of a service request (page 10, lines 6 – 7 from a third computer entity (page 16, line 17, “other computer entities”) in said peer to peer network.

Title: Use of Nodes to Monitor/Manage Peer to Peer Networks
Inventors: Huw Edward Oliver, Simon Crouch, Hans Daaneu
Ref: 300203615

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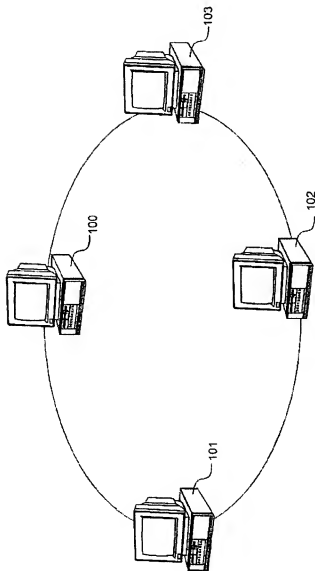


Fig.1

Title: Use of Nodes to Monitor/Manage Peer to Peer Networks
Inventors: Huw Edward Oliver, Simon Crouch, Hans Daanen
Ref: 300203615

2/9

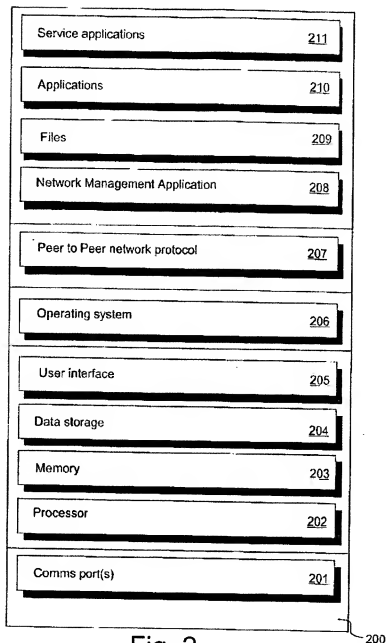


Fig. 2

Title: Use of Nodes to Monitor/Manage Peer to Peer Networks
Inventors: Huw Edward Oliver, Simon Crouch, Hans Daanen
Ref: 300203615

4/9

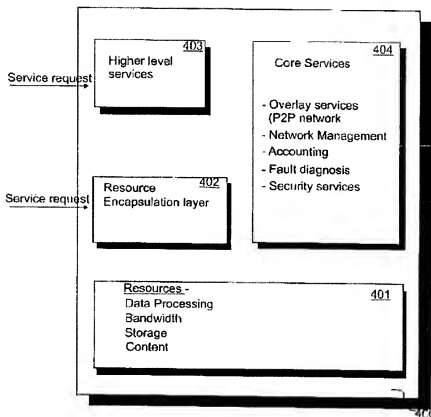


Fig. 4

Title: Use of Nodes to Monitor/Manage Peer to Peer Networks
Inventors: Huw Edward Oliver, Simon Crouch, Hans Daanen
Ref: 300203615

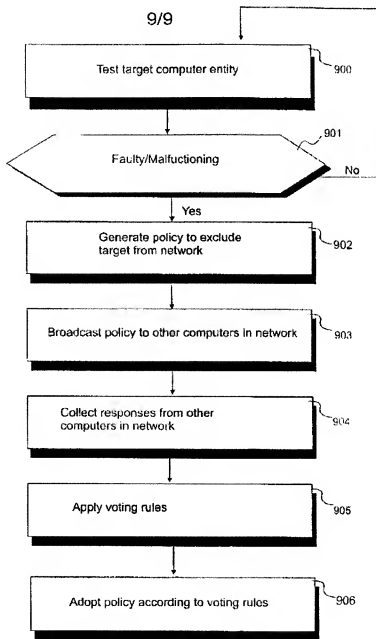


Fig. 9

(vi) Grounds of Rejection to be Reviewed on Appeal

The first issue presented for review is the propriety of the Examiner's final rejection of claim 16 under 35 U.S.C. 101 as being directed to non-statutory subject matter.

The second issue presented for review is the propriety of the Examiner's final rejection of claims 1, 5, 11, 16 and 17 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The third issue presented for review is the propriety of the Examiner's final rejection of claims 1 – 3 and 11 - 26 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,127,613 to Pabla et al. (hereinafter "the Pabla et al. patent").

The fourth issue presented for review is the propriety of the Examiner's final rejection of claim 4 under 35 U.S.C. 103(a) as being unpatentable over the Pabla et al. patent in view of U.S. Patent No. 7,137,145 to Gleichauf (hereinafter "the Gleichauf patent"), in further view of a document by Golle (hereinafter "the Golle document").

(vii) Argument

(1) The first issue presented for review is the propriety of the Examiner's final rejection of claim 16 under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Claim 16 provides for a data storage media comprising program data for controlling a first computer entity to perform a method that includes:

operating a peer to peer protocol for enabling said first computer entity to utilise a resource of a second computer entity in a peer to peer network, and for enabling said second computer entity to utilise a resource of said first computer entity in said peer to peer network; and operating a process for managing said second computer entity,

wherein said process utilises said resource of said first computer entity, and is invoked when said resource of said first computer entity is not being used by a service application at a higher level layer than said peer to peer protocol.

The Office Action, in section 1, contends that the claim 16 is directed to non-statutory subject matter. Appellants respectfully disagree.

“Functional descriptive material” consists of data structures and computer programs that impart functionality when employed as a computer component. When functional descriptive material is recorded on some computer readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized (MPEP 2106.01).

A computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program’s functionality to be realized, and is thus statutory. (MPEP 2106.01, citing *In re Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035).

Appellants submit that whereas claim 16 recites a **data storage media** comprising **program data** for **controlling a first computer entity to perform a method** that includes operating a peer to peer protocol, and **operating a process for managing said second computer entity**, it recites a computer-readable medium encoded with a computer program that is a computer element that defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program’s functionality to be realized, and is thus statutory. Accordingly, Appellants submit that claim 16 fulfills the requirements of 35 U.S.C. 101.

Appellants are requesting a withdrawal of the section 101 rejection of claim 16.

(2) The second issue presented for review is the propriety of the Examiner’s final rejection of claims 1, 5, 11, 16 and 17 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

NOTE: The Office Action, in section 2, presents several passages that are purportedly quotations from claims 1, 11, 16 and 17. However, none of claims 1, 11, 16 or 17 includes any of the quoted passages. For example, each of the quoted passages includes the phrase, “a third computer entity”, but

none of claims 1, 11, 16 or 17 includes a recital of “a third computer entity.” Nevertheless, below, Appellants are explaining that the claims comply with the written description.

(a) Claim 1 stands alone

Claim 1 is an independent claim. Above, under the heading “(v) Summary of Claimed Subject Matter”, and more specifically, under the sub-heading “Concise Explanation of Each of the Independent Claims”, Appellants provided an explanation of claim 1 that refers to the specification by page and line number, and refers to the figures by reference characters. Accordingly, Appellants submit that claim 1 complies with the written description.

Appellants are requesting a withdrawal of the section 112 rejection of claim 1.

(b) Claim 5 stands alone

Claim 5 is canceled, and as such, the rejection thereof is rendered moot. Appellants are requesting a withdrawal of the section 112 rejection of claim 5.

(c) Claim 11 stands alone

Claim 11 is an independent claim. Above, under the heading “(v) Summary of Claimed Subject Matter”, and more specifically, under the sub-heading “Concise Explanation of Each of the Independent Claims”, Appellants provided an explanation of claim 11 that refers to the specification by page and line number, and refers to the figures by reference characters. Accordingly, Appellants submit that claim 11 complies with the written description.

Appellants are requesting a withdrawal of the section 112 rejection of claim 11.

(d) Claim 16 stands alone

Claim 16 is an independent claim. Above, under the heading “(v) Summary of Claimed Subject Matter”, and more specifically, under the sub-heading “Concise Explanation of Each of the

Independent Claims”, Appellants provided an explanation of claim 16 that refers to the specification by page and line number, and refers to the figures by reference characters. Accordingly, Appellants submit that claim 16 complies with the written description.

Appellants are requesting a withdrawal of the section 112 rejection of claim 16.

(e) Claim 17 stands alone

Claim 17 is an independent claim. Above, under the heading “(v) Summary of Claimed Subject Matter”, and more specifically, under the sub-heading “Concise Explanation of Each of the Independent Claims”, Appellants provided an explanation of claim 17 that refers to the specification by page and line number, and refers to the figures by reference characters. Accordingly, Appellants submit that claim 17 complies with the written description.

Appellants are requesting a withdrawal of the section 112 rejection of claim 17.

(3) The third issue presented for review is the propriety of the Examiner’s final rejection of claims 1 – 3 and 11 - 26 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,127,613 to Pabla et al. (hereinafter “the Pabla et al. patent”).

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

In order to anticipate a claim under Section 102 and render it unpatentable, a single prior art reference must not only expressly or inherently disclose each and every element set forth in the claim, but the reference must also be enabling, i.e. it must clearly put the claimed subject matter in the possession of the public. *In re Brown*, 329 F. 2d 1066, 144 USPQ 245 (CCPA 1964); *In re Kalm*, 378 F. 2d 959, 1154 USPQ 10 (CCPA 1967); *Rem-Cru Titanium, Inc. v. Watson*, 147 F. Supp. 915 112 USPQ 88 (Dist. Ct., DC 1956); *Akzo N.V. v. United States ITC*, 808 F 2d 1471, 1 USPQ 2d 1241 (Fed. Cir. 1986); and *In re Spada*, 911 F 2d 705, 15 USPQ 2d 1655 (Fed. Cir. 1990). The mere disclosure of concepts does not anticipate.

(a) Claims 1 – 3, 11 – 18 and 21 – 24 stand or fall together

Claim 1 provides for a method performed by a first computer entity. The method includes, *inter alia*, operating a peer to peer protocol, and operating a process for managing a second computer entity. The process utilises a resource of the first computer entity, and is invoked when the resource is not being used by a service application at a higher level layer than the peer to peer protocol.

NOTE: The Office Action, on page 7, appears to suggest that claim 1 includes a recital of “operating a process, in cooperation with a third computer entity.” However, claim 1 does not mention a third computer entity.

Nevertheless, the Office Action, on page 7, suggests that several passages in the Pabla et al. patent are descriptive of operating a process for managing the second computer entity. Table 1, below, briefly summarizes the substance of each of the several passages.

TABLE 1

Pabla et al. (citation)	Summary of substance of cited passage
col. 12, lines 60 - 62	Mechanisms with which peers may find each other, cooperate with each other, and communicate with each other.
col. 13, lines 51 - 53	Peers may cooperate and communicate with each other by following a set of rules and conventions
col. 18, lines 17 – 39 and 43 - 50	Concerns joining a peer group, voting, finding a peer, and searching for peers
col. 19, lines 32 - 39	Sharing resources
col. 22, lines 17 – 21	Peer group service
col. 1, lines 32 - 34	Client/server relationships

None of the above-noted passages of the Pabla et al. patent appears to involve a computer entity managing another computer. But regardless of whether these passages involve a computer entity managing another computer, the Pabla et al. patent does not mention any particular criteria for invoking the processes described in the passages, and none of them is described as being invoked when some other resource is not being used. Thus, the Pabla et al. patent does not appear to disclose a method that includes a first computer entity operating a process that utilises a resource of the first computer entity, and is

invoked when the resource is not being used by a service application at a higher level layer than the peer to peer protocol, as recited in claim 1. Accordingly, Appellants submit that the Pabla et al. patent does not anticipate claim 1.

Claims 2 and 3 depend from claim 1. By virtue of this dependence, claims 2 and 3 are also novel over the Pabla et al. patent.

Claim 11 is an independent claim and includes a recital, similarly to claim 1, of a process that is invoked when a resource is not being used. Thus, claim 11, similarly to claim 1, is also novel over the Pabla et al. patent.

Claims 12 – 15 depend from claim 1. By virtue of this dependence, claims 12 – 15 are also patentable over the Pabla et al. patent.

Claim 16 is an independent claim and includes a recital, similarly to claim 1, of a process that is invoked when a resource is not being used. Thus, claim 16, similarly to claim 1, is also novel over the Pabla et al. patent.

Claim 17 is an independent claim and includes a recital, similarly to claim 1, of a process that is invoked when a resource is not being used. Thus, claim 17, similarly to claim 1, is also novel over the Pabla et al. patent.

Claim 18 depends from claim 17. By virtue of this dependence, claim 18 is also novel over the Pabla et al. patent.

Claims 21, 22, 23 and 24 depend from claims 1, 11, 16 and 17, respectively. By virtue of these dependencies, claims 21 – 24 are also novel over the Pabla et al. patent.

Appellants are requesting a withdrawal of the section 102(e) rejection of claims 1 – 3, 11 – 18 and 21 – 24.

(b) Claims 19 and 20 stand or fall together

Claim 19 provides for a method performed by a first computer entity. The method includes operating a process for managing a second computer entity, in response to receipt of a service request from a third computer entity.

The Office Action, at the top of page 11, suggests that the Pabla et al. patent describes the above-noted feature of claim 19, with reference to FIG. 13, and a passage at col. 20, line 44 – col. 21, line 16. Appellants respectfully disagree with the Office Actions assessment of the Pabla et al. patent.

The Pabla et al. patent, FIG 13 is a diagram illustrating two peers using a shared layered sharing policy and several protocols to share content (col. 20, lines 44 – 46). The passage at col. 20, line 44 – col. 21, line 16 does not appear to involve a third peer, and does not mention a service request from a third peer. The Pabla et al. patent does not describe operating a process for managing a second computer entity, in response to receipt of a service request from a third computer entity, as recited in claim 19. Accordingly, Appellants submit that the Pabla et al. patent does not anticipate claim 19.

Claim 20 is an independent claim and includes a recital, similarly to claim 19, of a response to a service request from a third computer entity. Thus, claim 20, similarly to claim 19, is also novel over the Pabla et al. patent.

Appellants are requesting a withdrawal of the section 102(e) rejection of claims 19 and 20.

(4) The fourth issue presented for review is the propriety of the Examiner’s final rejection of claim 4 under 35 U.S.C. 103(a) as being unpatentable over the Pabla et al. patent in view of U.S. Patent No. 7,137,145 to Gleichauf (hereinafter “the Gleichauf patent”), in further view of a document by Golle (hereinafter “the Golle document”).

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Furthermore, if an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Claim 4 depends from claim 1. Appellants respectfully submit that the cited combination of the Pabla et al. patent, the Gleichauf patent, and the Golle document does not disclose or suggest a method that includes a first computer entity operating a process that utilises a resource of the first computer entity, and is invoked when the resource is not being used by a service application at a higher level layer than the peer to peer protocol, as recited in claim 1. Accordingly, Appellants submit that claim 1, and claim 4, by virtue of its dependence on claim 1, are both patentable over the cited combination of the Pabla et al. patent, the Gleichauf patent, and the Golle document.

Appellants are requesting a withdrawal of the section 103(a) rejection of claim 1.

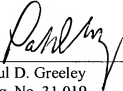
In view of the foregoing arguments, Appellants respectfully request that the Board of Appeals reverse the final rejection of claims 1 – 4 and 11 – 26.

Appellants note that the Office Action, on pages 5 – 6, claims 1 – 4, 11 – 16 and 18 – 22 are provisionally rejected on the grounds of non-statutory obviousness-type double patenting. Whereas the rejection is a provisional rejection, Appellants will address it when the claims of the present application are found to be otherwise allowable.

Respectfully submitted,

Date

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(viii) Claims Appendix

The claims on appeal are set forth below.

1. (previously presented) A method performed by a first computer entity, said method comprising:

operating a peer to peer protocol for enabling said first computer entity to utilise a resource of a second computer entity in a peer to peer network, and for enabling said second computer entity to utilise a resource of said first computer entity in said peer to peer network; and operating a process for managing said second computer entity,

wherein said process utilises said resource of said first computer entity, and is invoked when said resource of said first computer entity is not being used by a service application at a higher level layer than said peer to peer protocol.

2. (previously presented) The method as claimed in claim 1, wherein said process comprises: determining a policy by which said first computer entity will interact with said second computer entity.

3. (previously presented) The method as claimed in claim 1, wherein said process comprises: adopting a policy towards said second computer entity, wherein said policy is selected from a set of pre-determined policies for determining a relationship between said first computer entity and said second computer entity.

4. (previously presented) The method as claimed in claim 1, wherein managing said computer entity comprises a process selected from the group consisting of:

placing said second computer entity in quarantine;

controlling access by said second computer entity to a communal resource stored on said first computer entity; and

applying a charge for utilisation by said at least one other computer entity of a communal resource.

5 – 10. (canceled)

11. (previously presented) A first computer entity comprising:

a peer to peer networking component for allowing said first computer entity to engage other computer entities on a peer to peer basis; and

a network management component for enabling said first computer entity to participate in management of a peer to peer network,

wherein said network management component operates a process for managing a second computer entity in said peer to peer network, and

wherein said process utilises a resource of said first computer entity, and is invoked when said resource is not being used by a service application at a higher level layer than said peer to peer protocol.

12. (previously presented) The first computer entity as claimed in claim 11, wherein said network management component is activated whenever said peer to peer networking component is operational.

13. (previously presented) The first computer entity as claimed in claim 11, wherein said network management component comprises program data that controls said resource to perform a network management service.

14. (previously presented) The first computer entity as claimed in claim 11, wherein said network management component applies a policy for determining a mode of operation of said first computer entity in relation to said second computer entity.

15. (previously presented) The first computer entity as claimed in claim 11, wherein said network management component operates to:

communicate with a plurality of other computer entities of said network for sending and receiving policy data concerning an operational policy towards said second computer entity; and

determine, from a consideration of policy data received from said other computer entities, a global policy to be adopted by each computer entity in said network, towards a said second computer entity.

16. (previously presented) A data storage media comprising:

program data for controlling a first computer entity to perform a method that includes:

operating a peer to peer protocol for enabling said first computer entity to utilise a resource of a second computer entity in a peer to peer network, and for enabling said second computer entity to utilise a resource of said first computer entity in said peer to peer network; and

operating a process for managing said second computer entity,

wherein said process utilises said resource of said first computer entity, and is invoked when said resource of said first computer entity is not being used by a service application at a higher level layer than said peer to peer protocol.

17. (previously presented) A method performed by a first computer entity having:

a set of computing resources; and

a higher level service provided by a service application,

said method comprising:

operating a peer to peer protocol for enabling said first computer entity to utilise a resource of a second computer entity in a peer to peer network, and for enabling said second computer entity to utilise a resource of said computer entity; and

operating a process for managing said second computer entity,

wherein said process utilizes said set of computing resources, and is invoked when said set of computing resources is not being used by said service application at a higher level layer than said peer to peer protocol.

18. (previously presented) The method as claimed in claim 17, wherein said first computer entity automatically operates said process, in response to receipt of a service request from a third computer entity in said peer to peer network.

19. (previously presented) A method performed by a first computer entity, said method comprising:

operating a peer to peer protocol for enabling said first computer entity to utilise a resource of a second computer entity in a peer to peer network, and for enabling said second computer entity to utilise a resource of said first computer entity in said peer to peer network; and

operating a process for managing said second computer entity, in response to receipt of a service request from a third computer entity in said peer to peer network.

20. (previously presented) A first computer entity comprising:

a peer to peer networking component for allowing said first computer entity to engage other computer entities on a peer to peer basis; and

a network management component for enabling said first computer entity to participate in management of a peer to peer network,

wherein said network management component operates a process for managing a second computer entity in said peer to peer network, in response to receipt of a service request from a third computer entity in said peer to peer network.

21. (previously presented) The method of claim 1, wherein said process includes considering whether said second computer entity allows said first computer entity to utilise said resource of said second computer entity.

22. (previously presented) The first computer entity of claim 11, wherein said process considers whether said second computer entity allows said first computer entity to utilise a resource of said second computer entity.

23. (previously presented) The data storage media of claim 16, wherein said process considers whether said second computer entity allows said first computer entity to utilise said resource of said second computer entity.

24. (previously presented) The method of claim 17, wherein said process considers whether said second computer entity allows said first computer entity to utilise said resource of said second computer entity.

25. (previously presented) The method of claim 19, wherein said process considers whether said second computer entity allows said first computer entity to utilise said resource of said second computer entity.

26. (previously presented) The first computer entity of claim 20, wherein said process considers whether said second computer entity allows said first computer entity to utilise said resource of said second computer entity.

(ix) Evidence Appendix

None.

(x) Related Proceedings Appendix

None.